Current Biology 17, 1720, October 9, 2007 ©2007 Elsevier Ltd All rights reserved

Retraction

radish Encodes a Phospholipase-A2 and Defines a Neural Circuit Involved in Anesthesia-Resistant Memory

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(Current Biology *14*, 263–272; February 17, 2004)

Our identification of the *radish* gene as a phospholipase-A2 was based on two lines of evidence. First, we reported that a transposon insertion (C133) in a phospholipase-A2 gene failed to complement the memory defect of the original *radish*^{1} allele. Second, we showed that transgenic expression of the PLA2 cDNA within the C133 enhancer trap expression pattern rescued the memory defect of C133 mutant animals. After publication, we learned via personal communication with William Quinn at MIT that his laboratory had evidence that *radish*^{1} encoded a different gene. We then re-examined the phenotype of the C133 strain and were unable to reproduce our original finding that the transposon insertion causes a memory defect. After multiple attempts at behavioral characterization with the C133 transposon crossed into a variety of genetic backgrounds, we have come to the conclusion that our original claim was incorrect. The original genetic background upon which we obtained the C133 insertion does indeed exhibit defective anesthesia-resistant memory, but this memory defect is not caused by the C133 transposon insertion in the PLA2. Although we do not fully understand how this error occurred, our recent experiments force us to conclude that C133 is not allelic to *radish*^{1} and that the C133 P-element insertion was not responsible for the mutant phenotype we saw. This error directly undermines the conclusion that *radish* encodes a PLA2 but does not impact the neuroanatomical studies of the C133 expression pattern. Although we have communicated these findings to Quinn [1] and to many other colleagues, we felt it was essential to make this error known more broadly. We deeply regret any confusion that this has caused to the field.

Reference

1. Folkers, E., Waddel, S., and Quinn, W.G. (2006). The Drosophila radish gene encodes a protein required for anesthesia-resistant memory. Proc. Natl. Acad. Sci. USA *103*, 17496–17500.

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DOI: 10.1016/j.cub.2007.09.050